

CLAIMS

1. A method of manufacturing a stamper for manufacturing an information medium, comprising the steps of:

manufacturing a photoresist master by forming at least a
5 light absorption layer and a photoresist layer, in that order,
on top of a substrate, irradiating light onto said photoresist
layer from an opposite surface to that which contacts said
light absorption layer to form a latent image, and then
developing this latent image to form an protrusion/depression
10 pattern;

forming a thin metal film on top of said
protrusion/depression pattern of said photoresist master;

forming a stamper by forming a metal film on top of said
thin metal film, and separating said thin metal film and said
15 metal film from said photoresist master; and

providing Pd on a surface of said protrusion/depression
pattern as a preliminary treatment to the step of forming said
thin metal film on said photoresist layer.

2. The method of manufacturing a stamper for manufacturing
20 an information medium according to claim 1, wherein

in said step for providing Pd, a quantity Y of Pd
provided on a mirror surface, which represents an area in
which said protrusion/depression pattern is not formed,
relative to a quantity X of Pd provided on a pattern surface,
25 which represents an area in which protrusion/depressionnesses

are formed by said protrusion/depression pattern, satisfies
 $0.9X < Y < 1.1X$.

3. A stamper for manufacturing an information medium, in a
surface of the stamper an protrusion/depression pattern being
5 formed in advance, the stamper being manufactured by the steps
of: manufacturing a photoresist master by forming at least a
light absorption layer and a photoresist layer, in that order,
on top of a substrate, irradiating light onto said photoresist
layer from an opposite surface to that which contacts said
10 light absorption layer to form a latent image, and then
developing this latent image to form an protrusion/depression
pattern; forming a thin metal film on top of said
protrusion/depression pattern of said photoresist master;
forming the stamper by forming a metal film on top of said
15 thin metal film, and separating said thin metal film and said
metal film from said photoresist master; and providing Pd on a
surface of said protrusion/depression pattern as a preliminary
treatment to the step of forming said thin metal film on said
photoresist layer.

20 4. A photoresist master comprising a substrate, a light
absorption layer laminated on top of said substrate, and a
photoresist layer which is laminated on top of said light
absorption layer and is capable of having an
protrusion/depression pattern formed therein by forming and
25 subsequently developing of a latent image, wherein Pd is

provided on a surface of said protrusion/depression pattern.
formed in said photoresist layer.

5. A stamper for manufacturing an information medium,
manufactured from a photoresist master having a substrate, a
5 light absorption layer laminated on top of said substrate, and
a photoresist layer which is laminated on top of said light
absorption layer and is capable of having an
protrusion/depression pattern formed therein by forming and
subsequently developing of a latent image, and in which Pd is
10 provided on a surface of said protrusion/depression pattern
formed in said photoresist layer, wherein a quantity Y of Pd
provided on a mirror surface, which represents an area in
which said protrusion/depression pattern is not formed,
relative to a quantity X of Pd provided on a pattern surface,
15 which represents an area in which protrusion/depressionnesses
are formed by said protrusion/depression pattern, satisfies
 $0.9X < Y < 1.1X$.

6. An information medium, in which a final
protrusion/depression pattern is formed by using, as a
20 negative pattern, an protrusion/depression pattern of a
stamper manufactured by the steps of: manufacturing a
photoresist master by forming at least a light absorption
layer and a photoresist layer, in that order, on top of a
substrate, irradiating light onto said photoresist layer from
25 an opposite surface to that which contacts said light

absorption layer to form a latent image, and then developing said latent image to form an protrusion/depression pattern; forming a thin metal film on top of said protrusion/depression pattern of said photoresist master; forming a stamper by forming a metal film on top of said thin metal film, and separating said thin metal film and said metal film from said photoresist master; and providing Pd on a surface of said protrusion/depression pattern as a preliminary treatment to the step of forming said metal thin film on said photoresist layer.

7. The information medium according to claim 6, wherein said final protrusion/depression pattern is formed by direct transfer of said protrusion/depression pattern from said stamper.

8. The information medium according to claim 6, wherein said final protrusion/depression pattern is formed by transfer of an protrusion/depression pattern from a mother stamper, which has been formed by transfer of said protrusion/depression pattern using said stamper as a master stamper.

9. The information medium according to claim 6, wherein said final protrusion/depression pattern is formed by transfer of an protrusion/depression pattern from a child stamper, and said protrusion/depression pattern of said child stamper is formed by transfer of an protrusion/depression

pattern from a mother stamper, which has been formed by transfer of said protrusion/depression pattern using said stamper as a master stamper.

10. An information medium, in which a final
5 protrusion/depression pattern is formed by using, as a negative pattern, an protrusion/depression pattern of a stamper which is manufactured from a photoresist master having a substrate, a light absorption layer laminated on top of said substrate, and a photoresist layer which is laminated on top
10 of said light absorption layer and is capable of having an protrusion/depression pattern formed therein by forming and subsequently developing of a latent image, and in which Pd is provided on a surface of said protrusion/depression pattern formed in said photoresist layer, wherein a quantity Y of Pd
15 provided on a mirror surface, which represents an area in which said protrusion/depression pattern is not formed, relative to a quantity X of Pd provided on a pattern surface, which represents an area in which protrusion/depressionnesses are formed by said protrusion/depression pattern, satisfies
20 $0.9X < Y < 1.1X$.

11. The information medium according to claim 10, wherein said final protrusion/depression pattern is formed by direct transfer of said protrusion/depression pattern from said stamper.

25 12. The information medium according to claim 10, wherein

said final protrusion/depression pattern is formed by transfer of an protrusion/depression pattern from a mother stamper, which has been formed by transfer of said protrusion/depression pattern using said stamper as a master stamper.

13. The information medium according to claim 10, wherein

said final protrusion/depression pattern is formed by transfer of an protrusion/depression pattern from a child stamper, and said protrusion/depression pattern of said child stamper is formed by transfer of an protrusion/depression pattern from a mother stamper, which has been formed by transfer of said protrusion/depression pattern using said stamper as a master stamper.